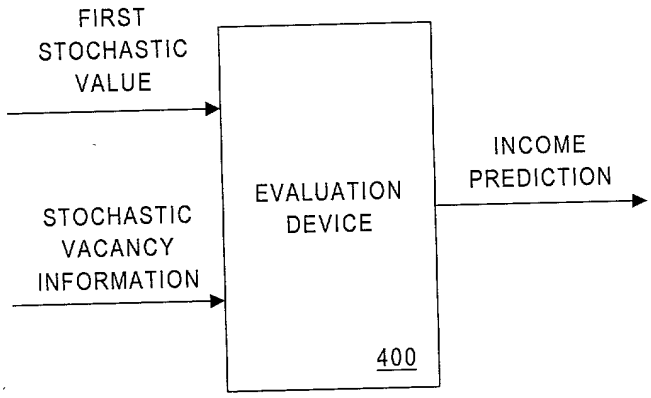

FIRST
STOCHASTIC
VALUE
STOCHASTIC
VACANCY
INFORMATION
EVALUATION
DEVICE
400
INCOME
PREDICTION

FIG. 1

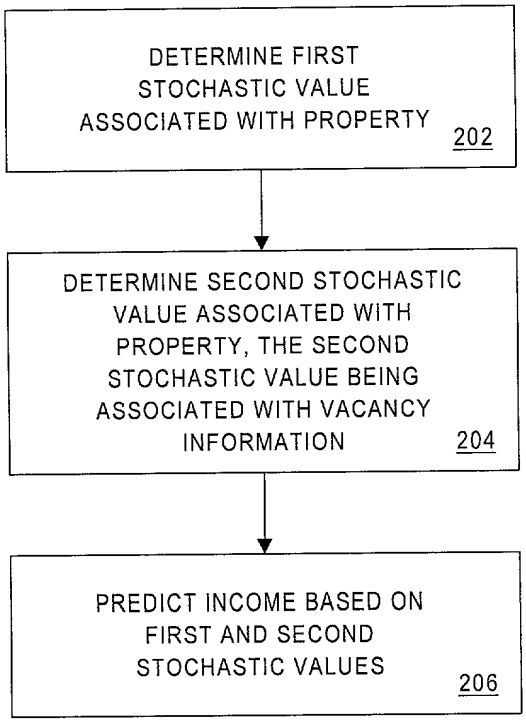

DETERMINE FIRST STOCHASTIC VALUE ASSOCIATED WITH PROPERTY
202
DETERMINE SECOND STOCHASTIC VALUE ASSOCIATED WITH PROPERTY, THE SECOND STOCHASTIC VALUE BEING ASSOCIATED WITH VACANCY INFORMATION
204
PREDICT INCOME BASED ON FIRST AND SECOND STOCHASTIC VALUES
206

FIG. 2

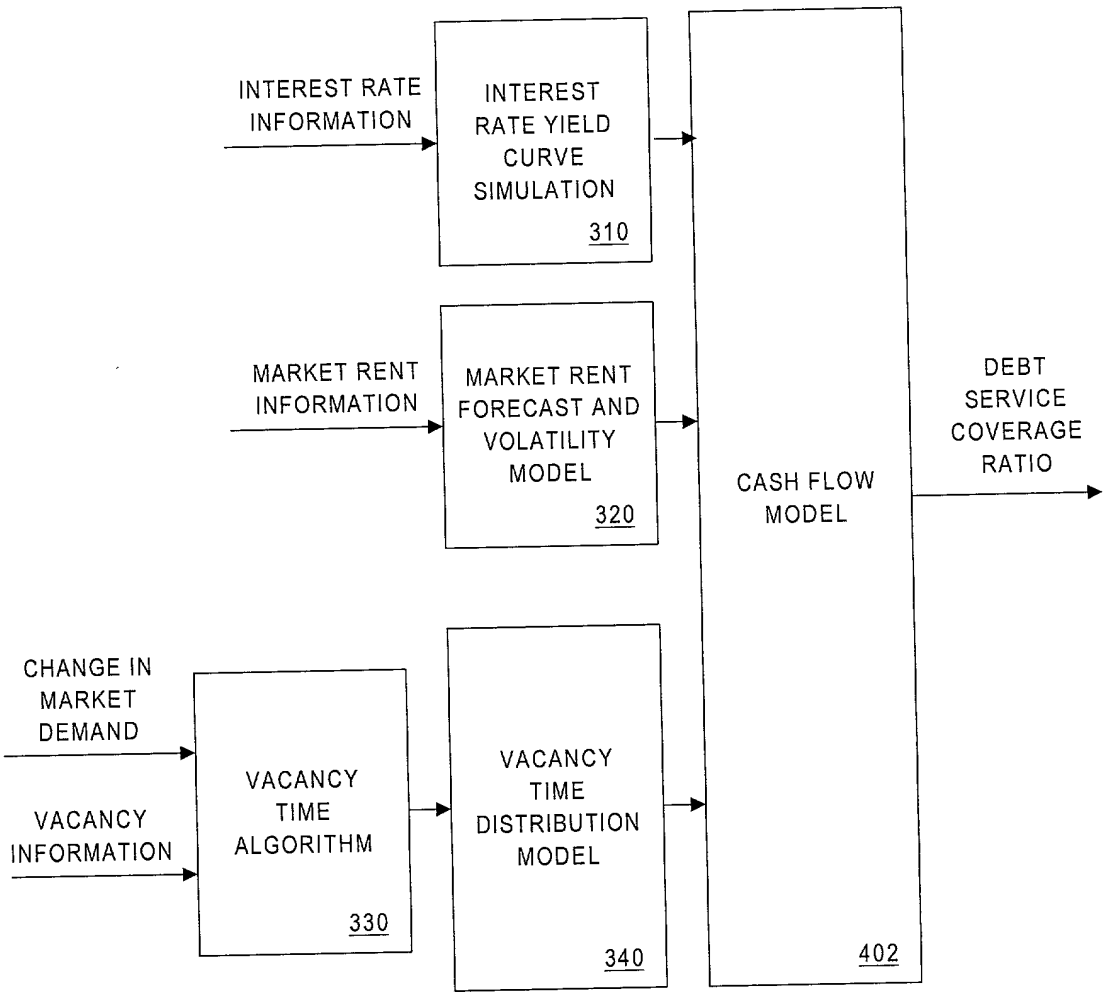

INTEREST RATE INFORMATION
INTEREST RATE YIELD CURVE SIMULATION
310
MARKET RENT INFORMATION
MARKET RENT FORECAST AND VOLATILITY MODEL
320
CHANGE IN MARKET DEMAND
VACANCY INFORMATION
VACANCY TIME ALGORITHM
330
VACANCY TIME DISTRIBUTION MODEL
340
CASH FLOW MODEL
402
DEBT SERVICE COVERAGE RATIO

FIG. 3

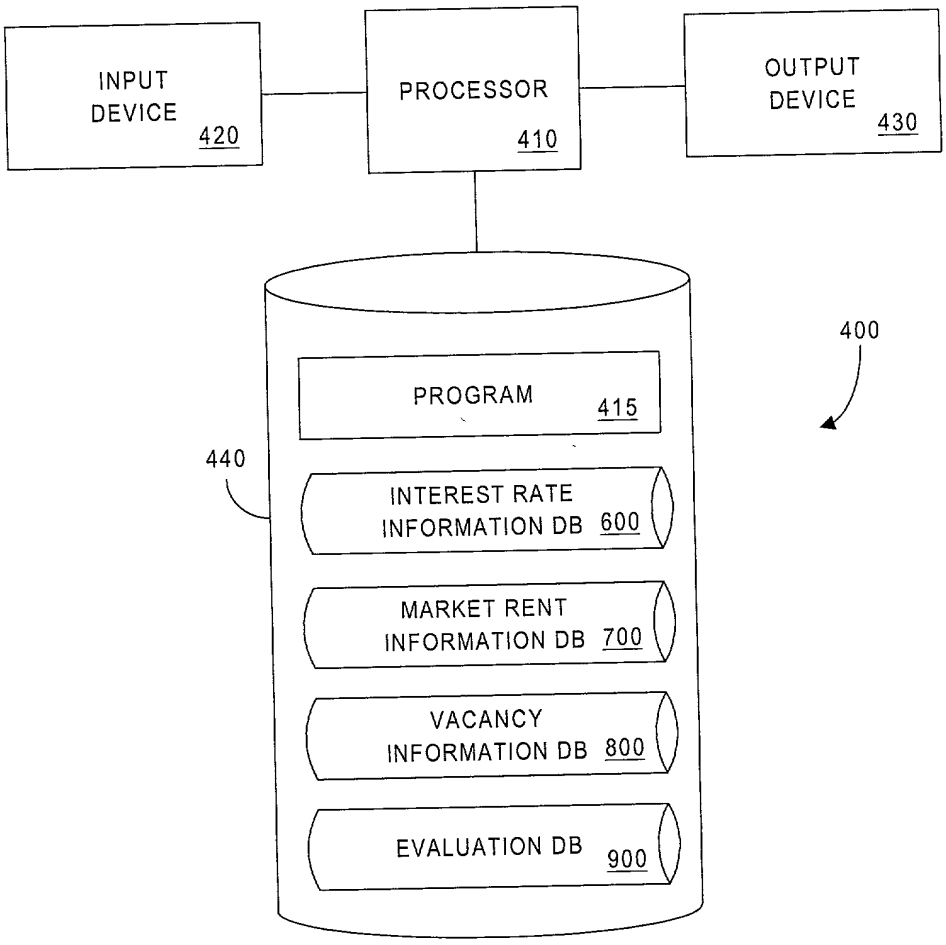
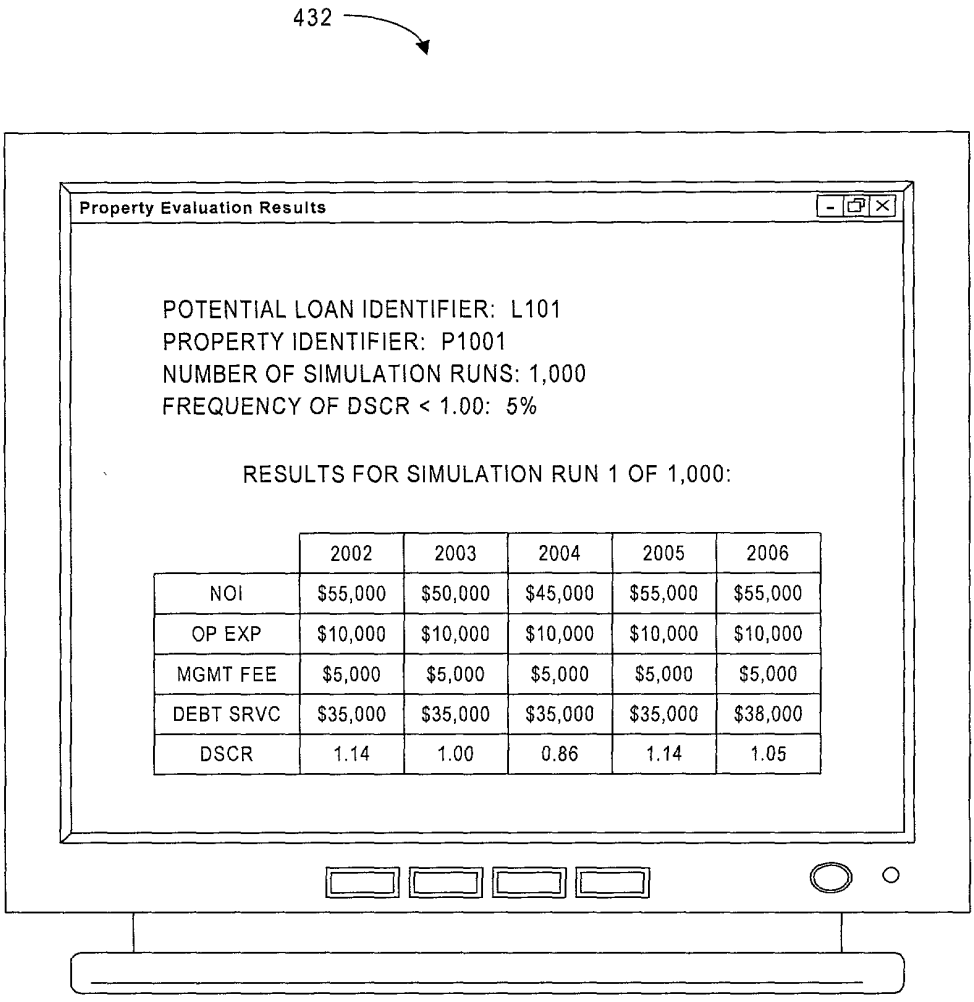

INPUT DEVICE 420
PROCESSOR 410
OUTPUT DEVICE 430
400
PROGRAM 415
440
INTEREST RATE INFORMATION DB 600
MARKET RENT INFORMATION DB 700
VACANCY INFORMATION DB 800
EVALUATION DB 900

FIG. 4

Electronic Acknowledgement Receipt



	2002	2003	2004	2005	2006
NOI	$55,000	$50,000	$45,000	$55,000	$55,000
OP EXP	$10,000	$10,000	$10,000	$10,000	$10,000
MGMT FEE	$5,000	$5,000	$5,000	$5,000	$5,000
DEBT SRVC	$35,000	$35,000	$35,000	$35,000	$38,000
DSCR	1.14	1.00	0.86	1.14	1.05

FIG. 5

600

INTEREST RATE INFORMATION IDENTIFIER 602	TIME PERIOD 604	SERIES OF PREDICTED INTEREST RATES 606
IR-1001	2002	6.00%; 6.25%; 6.00%; 6.50%; 6.25% ...
IR-1002	2003	6.25%; 6.25%; 6.50%; 6.00%; 6.75% ...
IR-1003	2004	6.75%; 6.25%; 6.00%; 7.00%; 6.75% ...

FIG. 6

700

MARKET RENT INFORMATION IDENTIFIER 702	TIME PERIOD 704	SERIES OF PREDICTED MARKET RENTS 706
MR-1001	2002	$26.50 SQ FT; $26.25 SQ FT; $26.50 SQ FT ...
MR-1002	2003	$26.50 SQ FT; $26.75 SQ FT; $26.25 SQ FT ...
MR-1003	2004	$26.75 SQ FT; $26.50 SQ FT; $27.00 SQ FT ...

FIG. 7

800

VACANCY INFORMATION IDENTIFIER 802	TIME PERIOD 804	SERIES OF PREDICTED VACANCY RATES, PERIODS 806
VI-1001	2002	5.0%, 3.0 WEEKS; 5.6%, 6.0 WEEKS ...
VI-1002	2003	8.0%, 9.0 WEEKS; 5.0%, 3.0 WEEKS ...
VI-1003	2004	7.0%, 9.5.0 WEEKS; 6.0%, 4.5 WEEKS ...

FIG. 8

900

PROPERTY IDENTIFIER 902	YEAR 904	NET OPERATING INCOME 906	OPERATING EXPENSES 908	MGMT FEES 910	DEBT SERVICE 912	DEBT SERVICE COVERAGE RATIO 914
P1001-001	2002	$55,000	$10,000	$5,000	$35,000	1.14
P1001-001	2003	$50,000	$10,000	$5,000	$35,000	1.00
P1001-001	2004	$45,000	$10,000	$5,000	$35,000	0.86
P1001-001	2005	$55,000	$10,000	$5,000	$35,000	1.14
P1001-001	2006	$55,000	$10,000	$5,000	$38,000	1.05
P1001-002	2002	$60,000	$10,000	$5,000	$35,000	1.29

FIG. 9

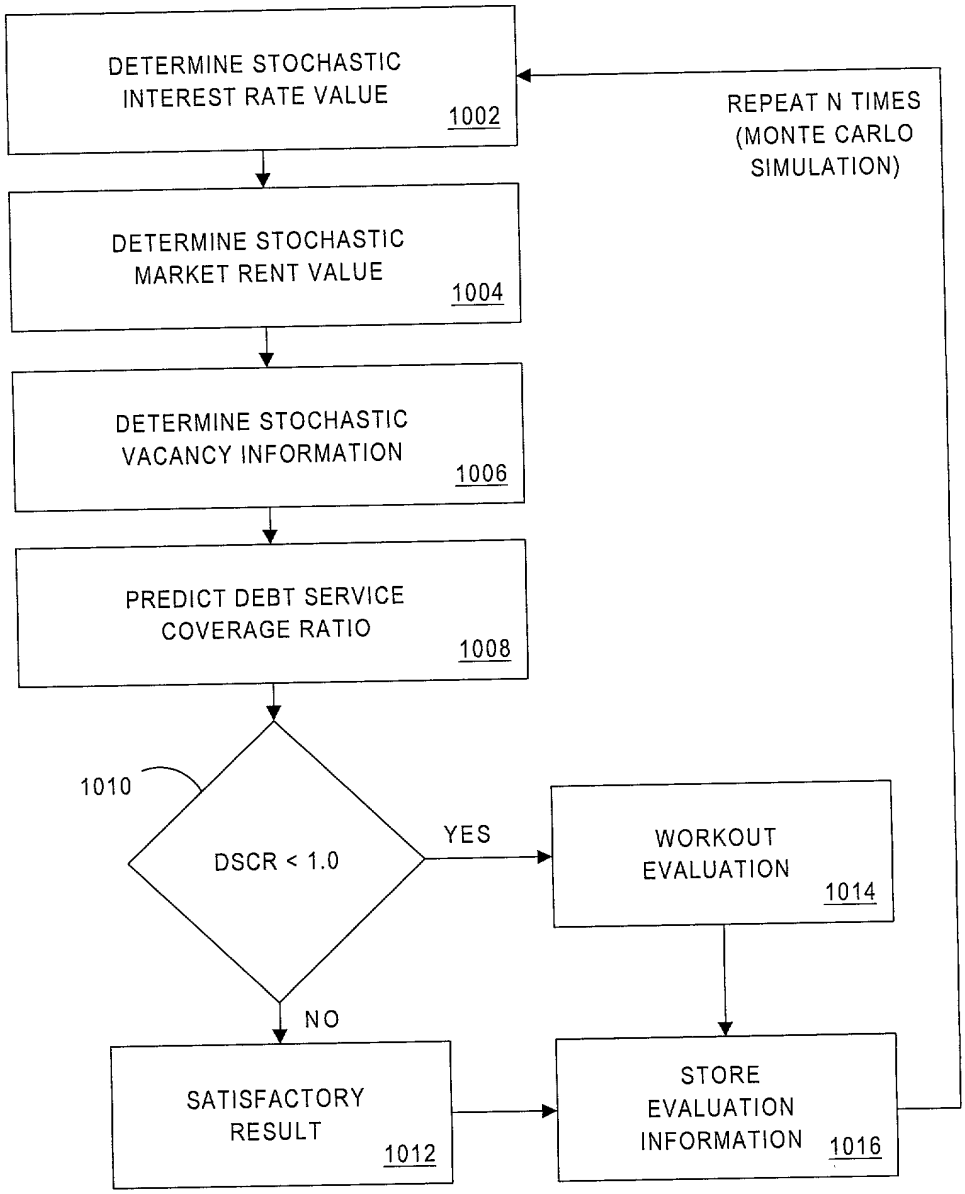

DETERMINE STOCHASTIC INTEREST RATE VALUE
1002
DETERMINE STOCHASTIC MARKET RENT VALUE
1004
DETERMINE STOCHASTIC VACANCY INFORMATION
1006
PREDICT DEBT SERVICE COVERAGE RATIO
1008
1010
DSCR < 1.0
YES
NO
WORKOUT EVALUATION
1014
SATISFACTORY RESULT
1012
STORE EVALUATION INFORMATION
1016
REPEAT N TIMES (MONTE CARLO SIMULATION)

FIG. 10

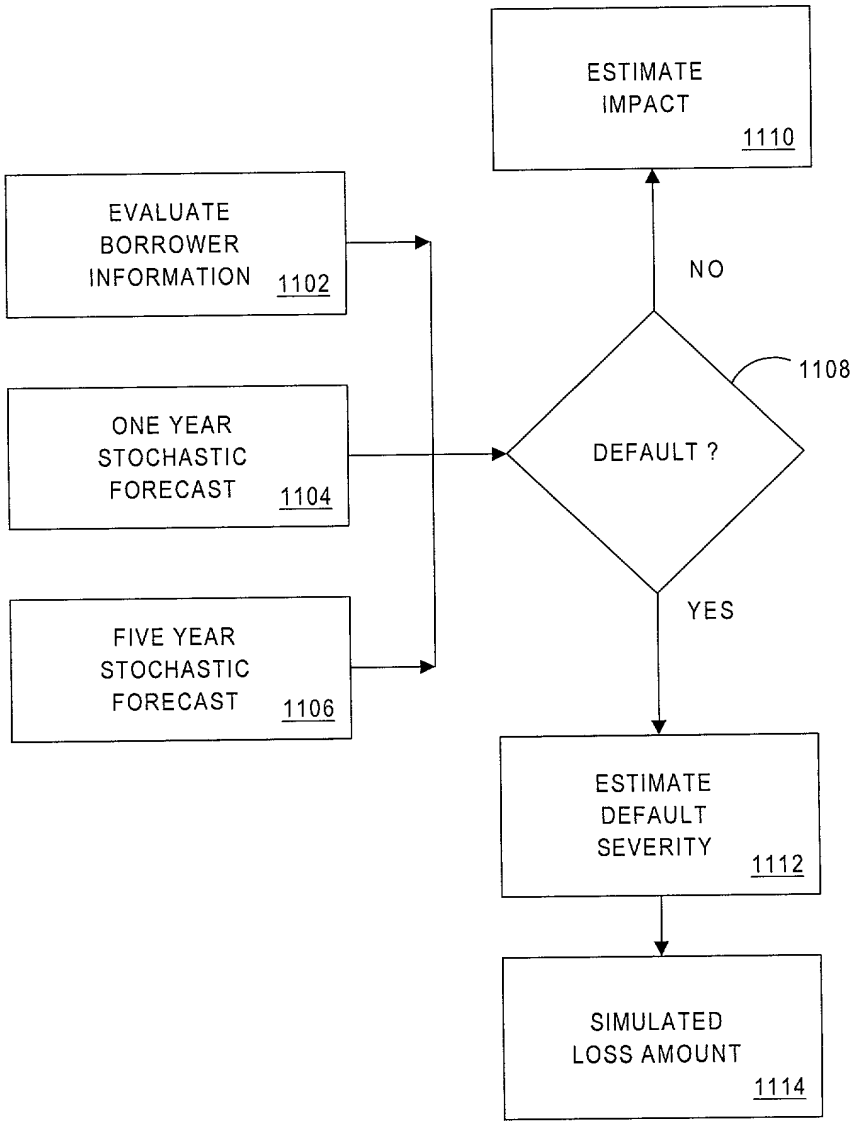

ESTIMATE IMPACT 1110
EVALUATE BORROWER INFORMATION 1102
NO
1108
ONE YEAR STOCHASTIC FORECAST 1104
DEFAULT ?
FIVE YEAR STOCHASTIC FORECAST 1106
YES
ESTIMATE DEFAULT SEVERITY 1112
SIMULATED LOSS AMOUNT 1114

FIG. 11

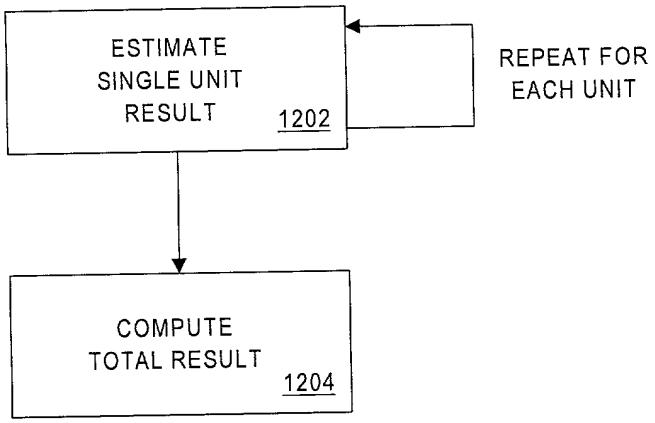

ESTIMATE
SINGLE UNIT
RESULT
1202
REPEAT FOR
EACH UNIT
COMPUTE
TOTAL RESULT
1204

FIG. 12

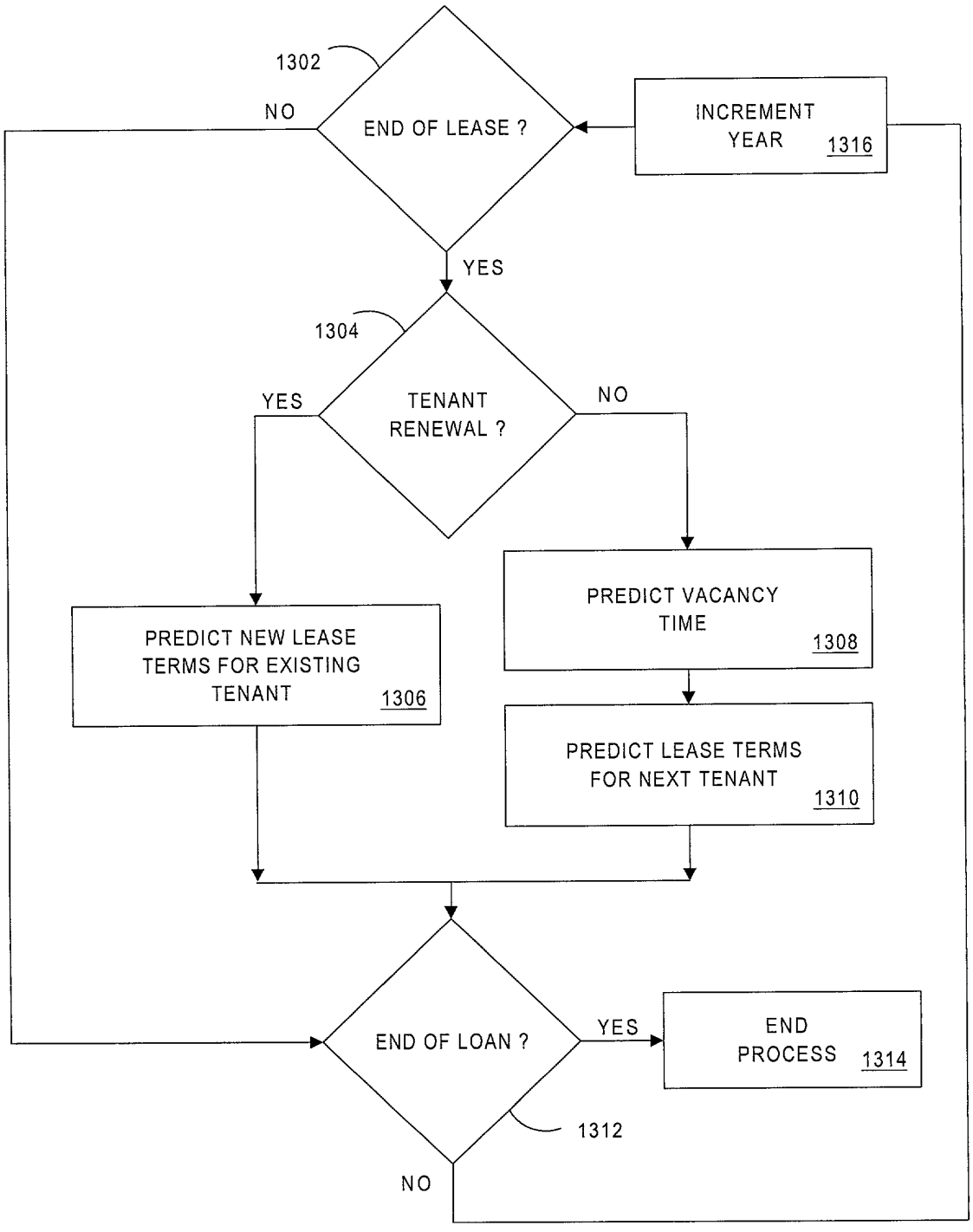

1302
END OF LEASE ?
NO
INCREMENT YEAR 1316
YES
1304
TENANT RENEWAL ?
YES
NO
PREDICT NEW LEASE TERMS FOR EXISTING TENANT 1306
PREDICT VACANCY TIME 1308
PREDICT LEASE TERMS FOR NEXT TENANT 1310
END OF LOAN ?
YES
END PROCESS 1314
1312
NO

FIG. 13